

Do you know?

Do you know that the African bull elephant is the largest land animal living today? Its ears alone can measure up to four feet across. This elephant usually grows about ten feet tall at the shoulders and weighs about six tons.



A red biplane with a white propeller and landing gear is shown in flight against a light blue sky. The plane is angled slightly upwards and to the right. The background is a simple, light-colored landscape with some green patches.

A colorful illustration of a brown sloth hanging from a thin tree branch. The sloth has a white face and chest. To the left, a red airplane is flying. The background is a light blue sky with a few green leaves on the branch. The text 'The slowest animal in the world' is written at the bottom.



The fastest jet.

Do you know?

by B.G. Ford • illustrated by Harry McNaught

A rainbow is made up of millions of tiny raindrops, reflecting the rays of the sun.

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Do you know the largest animals? The largest four-legged creature that ever lived on land was a dinosaur called Brachiosaurus. It stood about 35 feet tall and was 70 feet long from its nose to its tail.

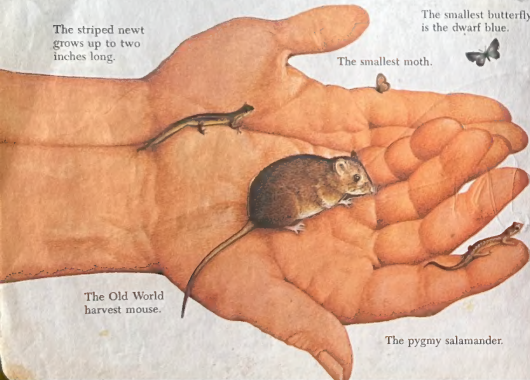


Brachiosaurus lived millions of years ago. But the largest animal that ever lived is still living now. The blue whale is a giant that lives in the ocean, but it is not a fish. It must come to the top of the water for air. The blue whale can grow up to 95 feet long and weigh 150 tons. That is as much as 25 African elephants weigh. The whale shark is the largest fish. It grows up to 50 feet long. This harmless shark eats only plankton—small plants and animals that live in the ocean. One of the largest snakes is the giant anaconda. It can grow more than 30 feet long.



Some animals are so tiny that you have to look close to see them. And millions of animals are so small that you cannot see them without a microscope. The little Old World harvest mouse is only five inches from its nose to its tail. The pygmy shrew is a very fierce fighter, but it is only three inches long and weighs about as much as a penny. The chihuahua is the smallest dog. It weighs only two or three pounds. A chihuahua puppy can sit in a teacup.

The striped newt grows up to two inches long.



The smallest butterfly is the dwarf blue.

The smallest moth.



The Old World harvest mouse.

The pygmy salamander.



The pygmy shrew.

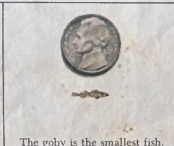


The smallest tree frog in the world is the least tree frog.

The smallest pouched mammal is the planigale, found only in Australia.



The smallest starfish.



The gobv is the smallest fish.



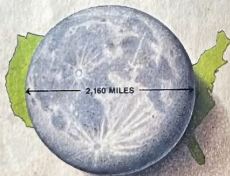
The chihuahua is the smallest dog.



Do you know that the moon is 225,000 miles from earth? To go that many miles in a fast car, you would have to travel 100 miles an hour for three whole months without stopping!

The moon makes a trip around the earth about once a month. It looks small to us because it is so far away. But it is almost as wide as the United States from New York to California.

If you stood on the moon and looked at the earth, you would not be able to see any mountains, buildings, or trees. You would see a blue-white ball. The blue would be earth's oceans. The white would be clouds.

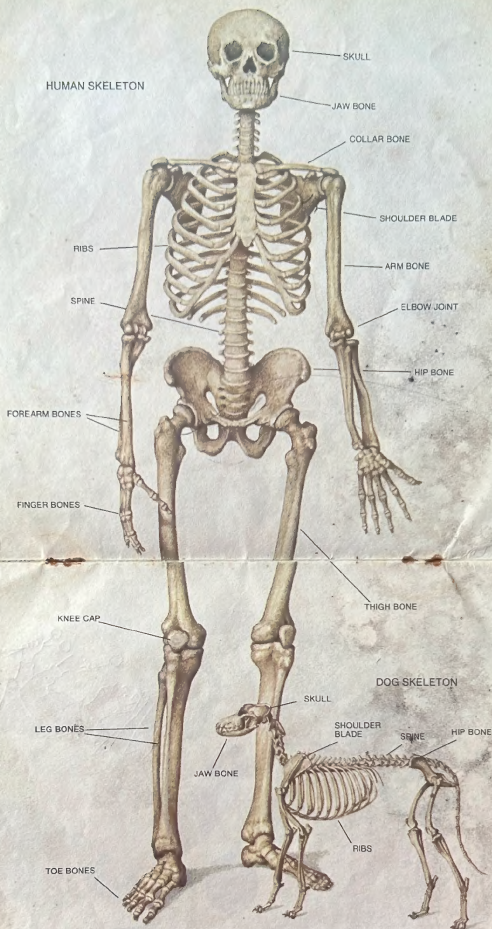


The diameter of the moon is 2,160 miles. New York is 3,000 miles from California.



Do you know that the earth is always changing? When an earthquake occurs or a volcano erupts, the changes are sudden. But most of the changes happen so slowly that we do not notice them. These changes take hundreds of thousands of years. Oceans rise up, covering parts of the land. Sheets of ice called glaciers move and carry rocks and dirt with them. Rivers wear down the earth to form steep canyons. And mountains are slowly worn flat by wind and rain.





Everybody has a skeleton. Without bones we could not stand up tall. Bones help us move. Bones protect the soft parts inside our bodies.

Do you know that humans have 206 bones? The shoulder blades, hip, and skull bones are flat. The thigh bone is the longest bone. The smallest bones are hidden deep inside our ears.

Most mammals have skeletons that look very much alike. Look at the dog's bones. Most of its bones look like the human's.

Do you know that an acorn is a seed? It has a baby plant inside. When an acorn falls on the ground where there is good soil and plenty of water, a baby plant starts to grow. In about twenty years or so, it will grow into a tall oak tree that has many acorns.

A black walnut is a seed. A pine cone has many tiny seeds. Maple seeds have "wings" that are carried by the wind. When the wind blows, dandelion seeds scatter. Each tiny fluff of white carries a small, dark seed. Just one seed can grow into a plant that bears many seeds.

ACORN

BLACK WALNUT

PINE CONE

MAPLE SEEDS

DANDELION SEEDS



PEACH SEED

ORANGE SEED

APPLE SEED

CORN

All seeds contain a baby plant. A kernel of corn from a cob is a seed. It can grow into a plant with many cobs. A sunflower has hundreds of seeds. A peach pit is a seed. Sweet peas are seeds.

Some seeds are planted by people. Others are covered with prickly burs. They stick to animals' fur. If these seeds fall off in good soil, a jimson weed, a cocklebur, or a beggar-tick plant might grow.

JIMSON WEED SEED

COCKLEBUR SEED

BEGGAR-TICK SEED





Some goldfish have lived for 17 years.



Deep-sea clams can live to be 100.



Queen ants may live up to 15 years.



Cats usually live to be about 15.



Dogs usually live to be about 13.



A sulphur-crested cockatoo lived to be 73 years old.



Adult mayflies live for just 24 hours!

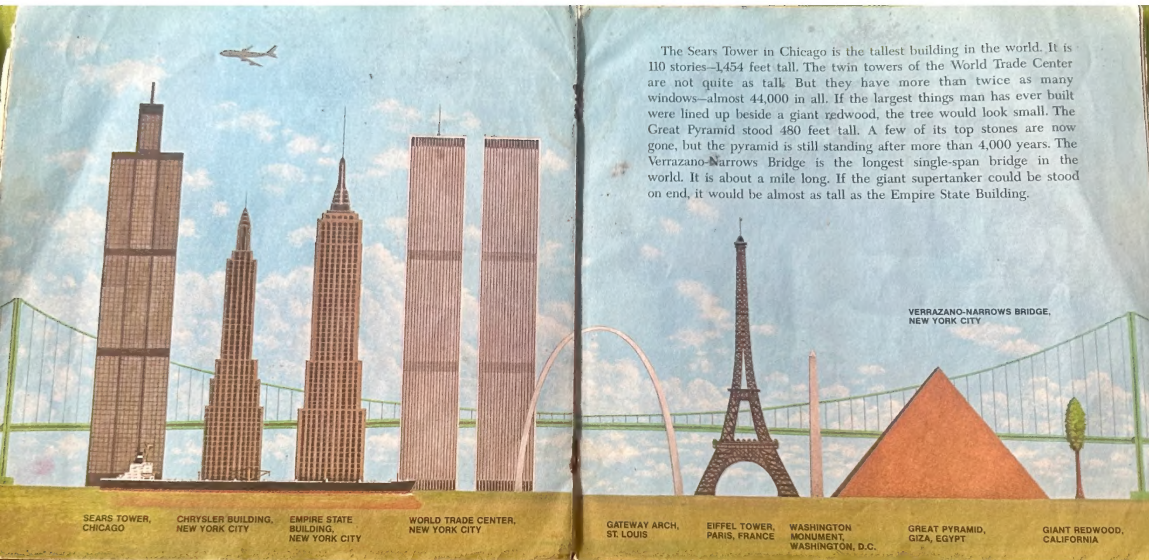


A giant sequoia called the General Sherman is the largest tree in the world.

The oldest living things on earth are certain kinds of trees. Some of them are also the largest. The giant sequoia is the largest kind of tree. Its trunk is very broad and it can grow up to 270 feet tall—taller than a 25 story building. Redwood trees have thinner trunks, so they are not quite as large. But they grow even taller—up to 365 feet. Some of these trees have been growing for almost 4,000 years. Only the smaller bristlecone pine trees are older.

No animals live for 4,000 years. But tortoises probably live longer than any others. Some have lived to be more than 150 years old!





The Sears Tower in Chicago is the tallest building in the world. It is 110 stories—1,454 feet tall. The twin towers of the World Trade Center are not quite as tall. But they have more than twice as many windows—almost 44,000 in all. If the largest things man has ever built were lined up beside a giant redwood, the tree would look small. The Great Pyramid stood 480 feet tall. A few of its top stones are now gone, but the pyramid is still standing after more than 4,000 years. The Verrazano-Narrows Bridge is the longest single-span bridge in the world. It is about a mile long. If the giant supertanker could be stood on end, it would be almost as tall as the Empire State Building.

VERRAZANO-NARROWS BRIDGE,
NEW YORK CITY

SEARS TOWER,
CHICAGO

CHRYSLER BUILDING,
NEW YORK CITY

EMPIRE STATE
BUILDING,
NEW YORK CITY

WORLD TRADE CENTER,
NEW YORK CITY

GATEWAY ARCH,
ST. LOUIS

EIFFEL TOWER,
PARIS, FRANCE

WASHINGTON
MONUMENT,
WASHINGTON, D.C.

GREAT PYRAMID,
GIZA, EGYPT

GIANT REDWOOD,
CALIFORNIA

Do you know where bread comes from? Bread and cake, cookies, spaghetti, doughnuts, and cereal are all foods that we get from wheat. Wheat is a grain that looks a lot like tall grass. After it is cut down, it is crushed into flour. When wheat flour is mixed with other ingredients, it can be made into good things to eat.



Wheat fields take up more farm land than any other food crop in the world.



Rubber comes from rubber trees.



Ice cream and cheese are made from milk.



Wood and paper come from trees.

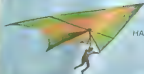


Cotton cloth comes from the cotton plant.





BLIMP



HANG GLIDER



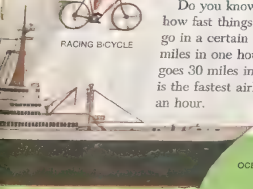
HELICOPTER



MOTORCYCLE



RACING BICYCLE



OCEAN LINER



ICE BOAT



NUCLEAR SUBMARINE



HYDROFOIL



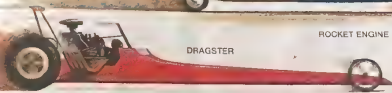
SUPERSONIC TRANSPORT



APOLLO SPACECRAFT



ROCKET ENGINE RACER



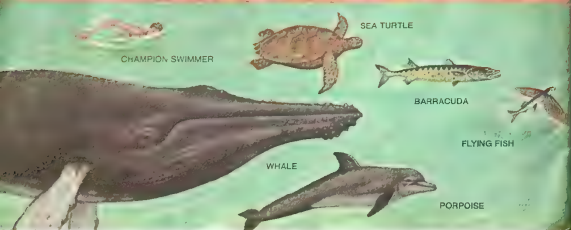
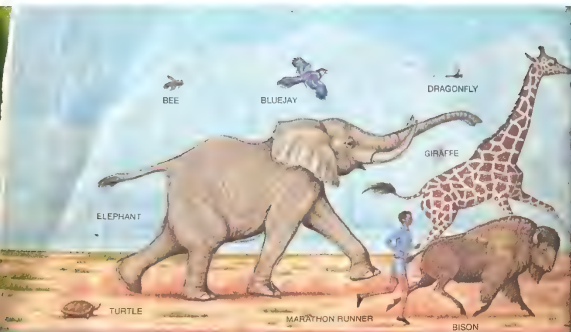
DRAGSTER



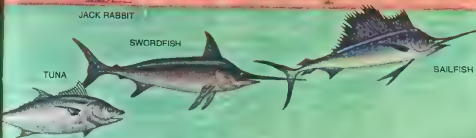
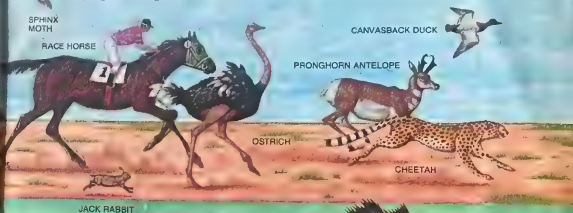
SPEEDBOAT

Do you know how fast things go? We can tell how fast things go by measuring how far they can go in a certain amount of time. A car that goes 60 miles in one hour travels twice as fast as a car that goes 30 miles in one hour. The supersonic transport is the fastest airliner. It can travel 1,500 miles an hour.

It is hard to imagine how fast a spacecraft must go to get to the moon. An Apollo spacecraft has gone 24,000 miles an hour! An ocean liner and a racing bicycle travel at about the same speed. A racing car with a rocket engine has gone 650 miles an hour.



The fastest land animal is the cheetah. It can run up to 65 miles an hour. But it can only go that fast for a very short time. If the cheetah had a race with the pronghorn antelope, the antelope would win. It can run 55 miles an hour for a much longer time. People in marathon races have run 13 miles an hour. But they cannot run that fast for long. Olympic champion swimmers can swim about 5 miles per hour.



The sailfish is the fastest swimmer in the ocean. It can swim up to 68 miles an hour. The large fin on its back is flat when it is swimming. It raises the fin for balance when it slows down.



Do you know how deep the oceans are? No one really knows for sure. Some parts of the Pacific Ocean are so deep that no one has ever touched the bottom. There are mountains under the ocean as tall as the tallest mountains on land. Some small islands are mountaintops that stick out of the water.

The *Trieste* is a bathyscaph that has gone down almost seven miles. Scientists want to find out more about the strange creatures that live at the bottom of the ocean.

Do you know that some birds can learn to say words? Parrots can learn to say many things.

The smallest bird in the world is Helena's hummingbird. Its wings measure just three inches from the tip of one to the tip of the other.

One bird uses a twig to dig for its food.

The largest bird in the world is the ostrich. It weighs about 300 pounds and can grow up to nine feet tall. But its wings are too small for flying. The ostrich lays larger eggs than any other bird. They are about six inches long and weigh about three pounds.

Penguins cannot fly. But the gentoo penguin can swim underwater at 22 miles per hour. That is as fast as some birds can fly!



One parrot has learned to say more than 1,000 words.



Helena's hummingbird, the smallest bird.



This bird uses a tool.



An ostrich egg can support the weight of a full-grown man.



The ostrich.



The gentoo penguin.



There are as many chickens in the world as there are people!

Do you know how far you can jump? Most people cannot jump much farther than their own height—even when they have a running start. A champion athlete has jumped 29 feet. That is almost five times the height of an average man. Some frogs can jump ten feet. And one kangaroo has jumped as far as 42 feet.





The giraffe is the tallest animal on earth. It can grow to be 19 feet tall. The giraffe's brain is quite small compared to the size of its body. But your brain is large compared to the size of your body.

Do you know how much you know? Your brain will be able to store as many as 100 million bits of information in your lifetime—more than one million bits of information a year! That's a lot of things to know!